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A CRITERION FACTOR ANALYSIS OF THE SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE.

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THE CORRELATION OF REPORTED VARIATIONS IN COUNSELOR PRACTICES WITH WELL-IDENTIFIED PERSONALITY TRAITS WAS STUDIED. THE SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE (WHICH MEASURES 15 PERSONALITY TRAITS AND INTELLIGENCE) AND THE INVENTORY OF COUNSELING PRACTICES (WHICH EVALUATES 75 COUNSELING PRACTICES) WERE GIVEN TO 120 GRADUATE GUIDANCE STUDENTS AT ARIZONA STATE UNIVERSITY. A CRITERION FACTOR ANALYSIS YIELDED FOUR FACTORS COMMON TO BOTH INSTRUMENTS. THESE FACTORS DEPICT FOUR PROTOTYPE COUNSELORS. THE SELF-SUFFICIENT COUNSELOR, WHO ACTIVELY STRUCTURES INTERVIEWS, IS RESOLUTE AND HAS A RATIONAL, DIRECT APPROACH. THE PROBING COUNSELOR, ANALYTICALLY SEEKING THE MOTIVES OF HIS CLIENTS, IS HIGHLY MORAL, CONSCIENTIOUS, AND PERSISTENT. SUCH A COUNSELOR SEES HIMSELF AS A GUARDIAN OF SOCIAL MORAL VALUES. THE RIGID, TASK-ORIENTED COUNSELOR IS MOTIVATED BY A NEED FOR ACHIEVEMENT. HE IS AMBITIOUS, IMPATIENT, TENSE, AND CONTEMPTUOUS OF THE AVERAGE. HE HAS LITTLE PATIENCE WITH THE CLIENT-CENTERED APPROACH. THE DEPENDENT, IMAGINATIVE, UNCONVENTIONAL COUNSELOR IS IMMATURE IN PRACTICAL MATTERS. HE AVOIDS RESPONSIBILITY AND FORCES IT ONTO HIS CLIENT. INTELLIGENCE APPEARS TO BE INDEPENDENT OF ATTITUDES TOWARD VARIOUS COUNSELING TECHNIQUES. WITH THE LARGER SAMPLE, ADDITIONAL RELATIONSHIPS MAY BE DISCOVERED. (PR)

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A Criterion Factor Analysis of the Sixteen Personality Factor Questionnaire[1]

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While it is generally agreed that the interview practices of counselors are influenced by underlying personality dynamics, the nature of this interaction remains a relative enigma. Weitz (1957) and Bugental (1964) in speculative papers have discussed the possible effects of selected personality variables on counselor and therapist interventions. Weitz emphasized security, sensitivity and objectivity as essential characteristics of an adequate counselor and Bugental proposed several subjective influences on the therapist which mediate his behavior. In one of the few empirical analyses which have been conducted, Campbell (1962) investigated the relationship between the measured personality traits of ascendence, restraint, thoughtfulness and persuasiveness and the subroles assumed by twenty-four counselors. His findings failed to achieve statistical significance.

The present study was conducted to determine how reported variations in counselor practices would fit into factor patterns along with the well identified personality traits which are measured by the Sixteen Personality Factor Questionnaire. It was anticipated that this analysis would help clarify and specify the interrelationships of personality variables and counselor behaviors and would prove useful to future investigators of this domain by furnishing a basis for hypothesis formulation.

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METHOD

The Instruments

The measure of counseling practices used in the study was a factored rating scale. The Inventory of Counseling Practices (ICP), which describes 75 discrete counseling practices arranged into a 4 pt. Likert Type Rating Scale (Mazer, 1965). The form of the ICP employed yields scores in 13 dimensions of interview behavior such as personal involvement, indirect control, permissiveness, etc. Regression coefficients were computed for entries on the 13 ICP factors which had loadings of .50 or greater. These Beta weights, rounded to a value of one or two, were used in calculating scores on each of the ICP dimensions.

The instrument used to measure personality characteristics was Form A of Cattell and Stice's Sixteen Personality Factor Questionnaire (1957) which is published by the Institute for Personality and Ability Testing. The Sixteen P.F. yields measures of fifteen bipolar personality factors and an intelligence factor.

The Handbook for the Sixteen P.F. reports split-half reliability coefficients (n=450) for Form A plus Form B ranging from .71 to .93. Validities which are based on factor loadings are similarly high, ranging from .73 to .96. These figures are reduced somewhat when Form A is exclusively used but are nevertheless quite respectable, extending from .58 to .92 when reduced by the Spearman-Brown prophecy formula.

Collection and Treatment of Data

The subjects for this study consisted of 120 graduate students enrolled in graduate counseling and guidance courses at Arizona State University during the spring semester, 1964.

The ICP and Sixteen P.F. were administered together in a classroom context during regularly scheduled class periods. Answer sheets were stapled together alternately to control any effects evoked by taking a particular test first.

The twenty-six factor scores from the ICP and Sixteen P.F. for each subject were key-punched into IBM cards and sent to Western Data Processing Center, University of California, where a principal components factor analysis was performed. Components with eigenvalues greater than unity were rotated to simple structure using normalized Varimax procedures.

RESULTS

The analysis yielded ten factors, four of which are loaded with entries from both the Sixteen P.F. and the ICP. These four factors are presented in Table 1 with entries having loadings of .30 or greater reported. The per cent of common factor variance (h^2) accounted for by each factor is given in parentheses.

The remaining six factors are presented in Tables 2 and 3. Letter notations and descriptive phrases used to designate entries from the Sixteen P.F. were abstracted from the Handbook. In order to facilitate interpretation and eliminate negative signs, several of the factor designations for the Sixteen P.F. have been reversed.

Combined Factors

The four factors in Table 1 are interpreted as follows:

Insert Table 1 about here

Factor 2 - Counselor Structuring.

Each of the counseling dimensions which appear in this factor is counselor-centered in nature and characterizes a counselor who actively structures the counselee's situation and employs tests, occupational information, and other cognitive devices to assist him solve his problems or make choices. To This counselor decision-making and/or problem solving is primarily a cognitive process and he tends to ignore the affective or emotional elements of the counseling relationship.

Occupying the same domain is the Self-sufficiency (Q_2 +) personality factor which characterizes a person such as a business executive "who is resolute and accustomed to making his own decisions, alone" (Cattell and Stice, 1957, p. 18). Factor 2 recalls the "rational, directive approach to health problems" identified in the factor analyses of Fey (1958) and others and points out the personality traits which may be concomitant with this view of counseling.

Factor 5 - Counselor Evaluation: Analysis. The personality dimensions in Factor 5 depict a highly moral, conscientious and persistent counselor who may view himself as a guardian of social moral values. The presence of (F-) suggests this counselor may be characterized by an absence of trust with regard to the behavior of others and he seeks motives or cause and effect

relationships not verbalized by the client. The Handbook reports that Super Ego Strength (G+) and Desurgency (F-) are characteristic of individuals who are "interested in analyzing people" such as policemen and psychiatric technicians. It is not surprising, therefore, that Probing is the counseling dimension which covaries with these personality traits. The factor is called Counselor Evaluation.

Factor 6 - Success Orientation. Most highly loaded on Factor 6 is the Shrewdness (N+) trait which is reportedly highly correlated with teaching success. It depicts the ambitious, perhaps rigid, task-oriented counselor who is motivated by a need for achievement and production, i. e., "to get the job done." Supplementing the concept is the Protension Factor (L+) which is characteristic of individuals who are impatient, tense, ambitious and contemptuous of the average. This counselor has little tolerance for a permissive, perhaps client-centered, approach to counseling, and Item 9, Permissiveness, is reflected.

Factor 7 - Laissez-faire: Indecisiveness. The personality traits loaded on Factor 7 present a dependent, imaginative, unconventional counselor who is immature in practical matters and therefore finds it difficult to be decisive (M+, I+). Forcing Responsibility is the entry concomitant with these traits since this dimension describes the attempts of the counselor to avoid taking decisive action or directing the course of the interview. This counselor appears to be the antithesis of the individual described by Factor 2.

Sixteen P. F. Factors

The factors in Table 2 which are loaded exclusively with Sixteen P. F. entries are briefly described as follows:

Insert Table 2 about here

Factor 1 - Anxiety vs. Personality Integration. The traits in the factor contrast anxiety and tenseness with composure and confidence.

Factor 3 - Extroversion vs. Introversion. These personality variables describe the social extrovert or introvert.

Factor 9 - Intelligence vs. Dullness. Factor 9 is a single variable factor, Intelligence. Its appearance suggests the distinction between cognition, personality, and counseling practices.

ICP Factors

In Table 3 are factors comprised of entries from the ICP alone. These three factors present a concise classification system of the major sources of variation in counseling practices: directiveness, nondirectiveness, and personal distance. The factors are interpreted as follows:

Insert Table 3 about here

Factor 4 - Directive Control. These are counseling dimensions which have a common component of control and directiveness. Friendliness: Interpersonal Involvement is an unexpected entry. Apparently befriending the client may be regarded as a means to gain directive control of his behavior.

Factor 8 - Personal Distance. The counseling dimensions in Factor 8 present techniques which the counselor employs to maintain personal distance between himself and the client. Behaving in an ambiguous manner, discussing vocational plans, maintaining a deferential relationship trhough approval, and being indifferently permissive represent pertinent techniques.

Factor 10 - Nondirection: Clarification. Factor 10 consists of classes of counseling behaviors which are nondirective in character. Attempts to clarify the client's feelings are seen as the most characteristic behavioral category.

It may be noted that identical counseling practices may serve different purposes. Permissiveness appeared on the Personal Distance factor (8) to denote indifference and also a behavior appropriate to the client-centered counselor. Approving can represent attempts to gain directive control of the client or alternately a technique to maintain deference and emotional distance.

Discussion

The covariance of personality factors and counseling behaviors is suggested by the results of the analysis. While the number of factors common to both personality and counseling factors is limited, some useful guidelines for investigations at a behavioral level have been provided.

It seems a reasonable assumption that a larger sample of counselors will generate additional relationships in a factorial solution. A number of additional correlations between the two sets of data appear in the intercorrelation matrix. However, these were of insufficient magnitude to generate factors.

The appearance of the combined factors (2, 5, 6, 7) permit conceptualization of four distinct prototype counselors and their counterparts. Briefly, they may be described as self-sufficient and rational (2), analytic (5), achievement oriented (6), and indecisive (7). It seems unlikely that these classifications would have been anticipated on an *a* priori basis and the taxonomy provides a useful scheme for describing counselors or variations in the behavior of an individual counselor.

The factors emphasize the many facets of personality which may be influential in a counselor's adherence to a particular approach to counseling. For example their patterns challenge the notion that "nondirective" counseling is the particular bent of only the warm-hearted altruist. While the appeal of this approach may indeed reflect a genuine liking for people, such traits as immaturity, a vague value system (M+) and a need for approval (Q^2-) may also be contributing motives. Similarly a "directive" point of view may attract counselors who are self-sufficient, decisive and resourceful (Q^2+) as well as individuals who gain satisfaction from influencing the behavior of others.

The three ICP factors: Directivness (4), Nondirectiveness (10), and Personal Distance (8), depict three major sources of variation in counseling and psychotherapy. Several previous factor analyses of counselor or therapist activity have yielded a similar solution.

A major disappointment was the failure of the Personal Distance factor to correlate significantly with personality entries. Apparently the extent to which a counselor is willing to involve himself personally with the client has little relationship to the traits measured by the Sixteen P.F.

Intelligence-Dullness also appeared as an independent factor, thus supporting the contention that cognition is independent of attitudes toward various counseling techniques. Consequently, it seems unlikely that measures of intelligence can be successfully used in making predictions concerning the interview behaviors of counselor trainees.

Table 1

Combined Factors

Item	Loading	Description		
		Factor 2 Counselor Structuring (12%)		
10	.73	Reassurance		
11	.71	Testing		
7	.60	Vocational Planning		
2	.46	Probing		
Q2	.39	Self-Sufficient, Resourceful (Self-Sufficiency	vs	Dependent, Imitative (Group Dependence)
1	.38	Suggesting		
		Factor 5 Counselor Evaluation: Analysis (9%)		
G	.76	Conscientious, Persistent (High Super-Ego Strength)	vs	Casual, Undependable (Low Super-Ego Strength)
F	.67	Glum, Sober, Serious (Desurgency)	vs	Enthusiastic, Talkative (Surgency)
Q2	.54	Self-Sufficient, Resourceful	vs	Dependent, Imitative
Q1	.44	Experimenting, Critical	vs	Conservative, Accepting
A	.43	Aloof, Cold (Schizothymia)	vs	Warm, Sociable (Cyclothymia)
2	.32	Probing		

:m	Loading	Description		
		Factor 6 Success Orientation (8%)		
N	.72	Sophisticated, Polished (Shrewdness)	vs	Simple, Awkward (Naivete')
-	.57	Suspecting, Jealous (protension	vs	Trustful, Adaptable (Inner Relaxation)
9	-.37	Permissiveness		
:	.30	Mature, Calm (Ego Strength)	vs	Emotional, Unstable
I	.30	Tough, Realistic (Harria)	vs	Sensitive, Effeminate (Premsia)
		Factor 7 Laissez-Faire: Indecisiveness		
M	.66	Bohemian, Unconcerned (Autia)	vs	Conventional, Practical (Praxernia)
	.66	Sensitive, Effeminate (Premsia)	vs	Tough, Realistic (Harria)
I	.55	Experimenting, Critical	vs	Conservative, Accepting
2	.49	Forcing Responsibility		

Table 2

Factors Comprised of Only Sixteen P.F. Entries

Item	Loading			
		Factor 1 Personality Integration vs. Anxiety (16%)		
Q4	.80	Phlegmatic, Composed (Low Ergic Tension)	vs.	Tense, Excitable (High Ergic Tension)
O	.79	Confident, Unshakable	vs.	Insecure, Timid
C	.75	Mature, Calm (High Ego Strength)	vs.	Emotional, Unstable (Low Ego Strength)
Q3	.65	Controlled, Exact (Self-Sentiment Control)	vs.	Lax, Unsure (Low Integration)
L	.52	Trustful, Adaptable (Inner Relaxation)	vs.	Suspecting, Jealous (Protension)
M	.41	Conventional, Practical (Praxernia)	vs.	Bohemian, Unconcerned (Autia)
		Factor 3 Extroversion vs. Introversion (9%)		
E	.77	Submissive, Mild	vs.	Dominant, Aggressive
H	.67	Timid, Shy (Threctia)	vs.	Adventurous, 'Thick-Skinned' (Parmia)
A	.49	Aloof, Cold (Schizothymia)	vs.	Warm, Sociable (Cyclothemia)
F	.40	Glum, Silent (Desurgency)	vs.	Enthusiastic, Talkative (Surgency)
		Factor 9 Intelligence vs. Dullness (7%)		
B	.85	Dull, Low Capacity	vs.	Bright, Intelligent

Table 3

Factors Comprised of Only ICP Entries

Item	Loading	Description
		Factor 4 Directive Control (12%)
8	.80	Nonverbal Direction
13	.71	Approving
3	.68	Friendliness
1	.65	Suggesting
		Factor 8 Personal Distance (9%)
4	.76	Noninvolvement
7	.53	Vocational Planning
13	.37	Approving
9	.36	Permissiveness
3	-.36	Inter-personal Involvement
		Factor 10 Non Direction: Clarification
6	.66	Clarification of Feeling
12	.58	Forcing Responsibility
9	.56	Permissiveness
5	.54	Empathy
2	.42	Probing

Abstract

A criterion factor analysis of the responses of 120 graduate students enrolled in counseling courses at Arizona State University to the Inventory of Counseling Practices and the Sixteen Personality Questionnaire yielded four factors common to both instruments. These factors depict four prototype counselors: a self-sufficient counselor who directs the course of the interview; an individual motivated by a need for production; an evaluating analytic type and an indecisive counselor who forces responsibility. Six additional factors generated by the analysis are interpreted.

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